

Dansk Brugerhåndbog

Copyright © (1990-2022) SW-Tools ApS Duevej 23 DK-3250 Solrød Strand Denmark Phone: +45) 33 33 05 56 Mail: swtools@swtools.com www: www.swtools.com

TRIO Frigivelses information (008.000)

22/11/01 / 2022-09-01 008.384

Indholdsfortegnelse

Indholdsfortegnelse	
1. Forord	
2. Start and installation of TRIO	
2.1. Start of TRIO	
2.1.1. User login	
2.1.2. Logo	
2.1.3. User maintenance	
2.1.3.1. Creating the users	
2.1.3.2. Upgrading with real user administration license	
2.2. Installation and upgrading	13
2.3. Manuals	
3. Printing from TRIO	17
3.1. Printer setup	
3.1.1. The TEST button	
3.1.2. The ADVANCED Button	20
3.2. Forms	
3.2.1. Creation of forms	22
3.2.2. Controlling the form print from the calculations	23
3.2.3. Handling of forms during the layout definition	24
3.3. PIP Print archiving	25
3.3.1. Screen printer display when using PIP	26
3.3.1.1. Screen printer display without using PIP	27
3.3.2. Recalling an archived print	
3.3.3. Report start statistics	29
3.3.3.1. Use of the report start statistics	
3.3.4. Structure of the PIP files	
3.3.5. The SSV Printindex file	32
3.3.5.1. Defining the printindex for individual print recall	33
3.3.5.2. Calculations in IQ for individual print recall	
3.3.5.3. The IQ program for PIP print recall	
3.3.5.4. Calculations in IQ to ease searching	
3.3.6. PIP Print archiving controlled from within the calculations	
3.3.7. Cleanup of old print	
3.3.8. PIP Locking and error handling	
4. Report layout definition and tuning	
4.1. The layout function	
4.1.1. New layout when report is defined	
4.1.2. Autosize of fields	
4.1.3. Alignment	
4.1.4. Auto scroll when moving, inserting items in layout	
4.2. Layout preferences	
4.2.1. Display options	
4.2.1.1. Grid	
4.2.1.2. Page frame	
4.2.1.3. Use line height instead of font height	
4.2.2. Vertical position step	
4.2.3. Horizontal/vertical measurement, ruler and alignment	
4.3. Additional picture formats	
4.3.1. Scaling of pictures	
4.3.2. Animation of pictures	
4.4. The database window, display and search	
4.4.1. The display and sort of the database window	

4.4.2. Searching the database	58 59
4.4.4. Actions by click on a field in the database window	
4.4.5. The function parameter wizard help	61
5. IQ	62
5.1. GRID listboxes	
5.2. DGRID for simple data selection	65
5.3. SCROLLBAR object	
6. The datadictionary	
6.1. Long datadictionary file ID	69
6.2. Datadictionary fieldnumbers	70
6.3. Datadictionary standard field formats	71
6.3.1. The standard FORMAT file	
6.3.2. Defining a file using the standard formats	73
6.4. Integration between different database systems	74
6.4.1. The database system IDs	
6.4.1.1. Creation of database identifications	76
6.4.1.2. The database window when BASID is activated	77
6.4.1.3. The fixed database ID's MAIN and SYS	
6.4.2. File connections spanning over different databases	79
6.5. Datadictionary calculations / Stored procedures	80
6.6. User definable subfunctions	81
6.6.1. Selecting the function definitions	82
6.6.2. Creation of new functions	83
6.6.3. How it works	
7. External packages and runtime licences	85
7.1. Packages	
7.1.1. Package numbers	
7.2. TRIO Runtime licenses	
7.3. Activating a package in TRIO	
7.3.1. How TRIO handles a package	90
7.3.1.1. Package licenses	91
7.4. The license input program	
7.4.1. The distributors license file	
7.4.2. Entering the distributor license	
7.4.2.1. DISK input and output of license files	
7.5. Preparing a package on the distributor site	
7.5.1. The licensing package	
7.5.2. Making the package ZIP file	98
7.5.2.1. Contents of the package ZIP file	99
7.5.3. Issuing a license for the package1	
7.5.4. Copying the package to the customer side1	
8. Other amendments and enhancements1	02
8.1. Limits	103
8.2. Memory and optimisation1	04
8.3. SW-Tools ODBC Driver	
8.4. UNIX server SWTUSOCK1	106
8.4.1. LINUX server	
8.5. Descending index definition1	108
8.6. EXPORT Append to file1	109
8.7. Japanese kanji codetables1	
8.8. Network pathnames1	
8.9. User administration1	
9. Subfunctions1	13
9.1. The ZIP and UNZIP functions1	14

9.1.1. UNZIP - Unpack files	115
9.1.2. <u>ZIP</u> - Zip file compression	
9.2. PRINT functions	117
9.2.1. <u>PIP</u> - Print archiving	118
9.2.2. SCRPRT - Recall screen print (IQ)	
9.2.3. PRINT - Print formula	
9.2.4. PRINT(LAB= - Label function (RAP)	121
9.3. The GRID Functions for IQ	
9.3.1. DGRID - Dialog Database Grid (IQ)	
9.3.2. <u>GRIDHDR</u> - Set header for grid (IQ)	124
9.3.3. GRIDFLD - Set fields values into grid row (IQ)	
Figur liste	126
Index	128

1. Forord

The release 008 of TRIO contains the following enhancements:

Users

- User maintenance and login (also without user administration)
- Report start statistics (also without user administration)
- Print
- PIP Print archiving
- Formulary print on reports
- Support of different picture formats (GIF/TIF/PCX etc)

Runtime

- ZIP and UNZIP functions for packed file handling
- RUNTIME package and license handling

IQ

- GRID listboxes
- DGRID data selection input listboxes
- Scrollbar type objects

Datadictionary

- Search facilities on files and fields
- Extension of file ID from 2 to 8 characters
- Extension of fieldnumbers from maximum 999 to 999999999
- Raising of different limits (fieldlength/recordlength etc)
- Integration of different database definitions in one program
- Datadictionary calculations
- Datadictionary standard field formats (like AMOUNT and DATE)

Languages and installation

- Language support of French, Spanish, Swedish
- Installation program updated to 32 bits long pathnames

Manuals

- Now online on the CD together with a print program

For customers with maintenance contract the additional functionality will be free of charge, these customers will receive an update when the test period has ended.

2. Start and installation of TRIO

2.1. Start of TRIO

The startscreen for TRIO has been changed to look as:



1. Start of TRIO

2.1.1. User login

TRIO without user administration has been opened to start with a username anyway in order to take advantage of the HOMEPATH, which may be given for each user.

	Licens nummer:	99999999
	Distributør:	99999999
SW-look III	Installations dato:	9601
2 M - 10012	Туре:	Ch/
	Version:	008.303
SN	/-Tools	
Brugernavn	super	
Password		
		<u>OK</u> <u>F</u> ortryd

2. Start of TRIO when more users are activated

2.1.2. Logo

You may design your own logo, store this in the file SWTRIOLL.BMP which will display like:

sw-Tools	Licens nummer: Distributør: Installations dato: Type:	99999999 99999999 9601 Ch/	
SV Brugernavn Password	× 1000-000	008.303	
	<u> </u>		
		<u>ok</u>	Eortryd

3. Start of TRIO with own logo activated

2.1.3. User maintenance

Users may be defined even if the user administration is not activated, however no individual user privileges can be made.

This means the User administration may be selected and setup, but the definition screen is without the privilege definitions:



4. The reduced user menu

2.1.3.1. Creating the users

On the user maintenance screen the fields for user group and grant/revoke are omitted as all users becomes superusers when the user administration license is not present.

1=super 2=user	BrugerID	d
3=a	Password	-
4=z 5=d	Hjemmesti	d:\ssvdemo\dan
	Bemærkning	10 19 1 19 1 19 1 19 1 19 1 19 1 19 1 1
	Bemærkning	
	- 1	
1		

5. The reduced user maintenance screen

Apart from these reductions the user maintenance follows the procedure as described in the user administration manual, and you gains the advantage of the HOMEPATH enabling you to split different applications on one system dependent on login instead of using subsystems or different Windows icons.

2.1.3.2. Upgrading with real user administration license

Without the module user administration is present on the license the main user SUPER is created as superuser (usergroup 1-Revoke), all other users as USER (usergroup 2-Grant), but all threaded as superusers with all rights including right to create other users.

If user administration later is added to the license, even without being X-Marked for the specific PC, the treatment of all users as superusers is terminated and the first user (SUPER) only may create other users.

For security reasons, a user password file created with user administration license activated, cannot be used directly on a PC without this license, as this would violate the protection system.

2.2. Installation and upgrading

Due to support of more languages the installation screen has been changed to:



6. The language screen



7. The 16/32 bit screen



8. The product screen

The installation program for the 32 bit version is now running 32 bits also, which allows the use of long filenames already by installation.

TRIO version 008 if fully compatible with version 007, but you should note that the opposite is not the case. If you use fileID's of more than 2 characters no backward compatibility is possible, file definitions cannot be exported to previous versions or to the VIEW basic report generator.

Also the use of database interaction, external packages, GRID functions or PIP print collection will not be moveable to TRIO versions below 008.

By upgrading it is possible to use any persistent 007 server module, but we recommend upgrading the server to version 008 also, which will be able to service a mix of clients on newest or older versions. It is not possible to use long fileIDs, fieldnumber modifications or like with a 007 server.

2.3. Manuals

Manuals will from version 008 be distributed on CD only together with a program enabling the user himself to print as many copies as needed:

📲 Manual printer		
Printer	EPSON Stylus	COLOR 800 (LPT1:)
<u>S</u> krift	Tekst	×
WPP fil	IQ Brugerhånd DATAMASTER SW-Tools Gra	g subfunktioner Ibog Brugerhåndbog
Udskriv sider	Alle Ulige Lige Ulige+Lige	 ✓ Eorside ✓ Indhold ✓ Appendix ✓ Index
⊠ Si <u>d</u> er		<u>O</u> K <u>Fortryd</u>

9. Printout of manuals

3. Printing from TRIO

In order to make reports more distributeable in package form, where change of printers is most likely when the package is installed, field boxes in the layout will now be set to automatic resizing by default, as has some of the printroutines been reworked.

However you should note that when inserting a field in a report the selected font may be a PRINTER font, which varies with the printer used. A good advise when developing reports to be used on different printers is to use a general font only as times new roman or like, and to force the printer driver in windows to download TrueType fonts, not using any hardwired fonts in the printer.

Also new facilities for print archiving and form print has been added.

3.1. Printer setup

The printer setup has been extended with a TEST and an ADVANCED button:

Nr	Na∨n		_	<u>I</u> ndsæt
0	Skærm			Slet
1	Brother Portrai	fi -		
2	Brother Landso	ape		Opsætning
• 3	Canon Capsl			Skrift
4	Brother COLOF			
5	Brother COLOR	l Landscape		Server spool
•				<u>T</u> est
Måleen	hed	cm 💌		<u>E</u> xtra
Side bro	edde	20.99		
Side hø	jde	29.68		
Standar	d linie højde	0.00		
Margin	er	8	Parametre	
Venstre	margin	0.50	🗆 <u>S</u> kærm printe	er
Højre m	argin	0.81	🗖 Tilpas til side	e <u>b</u> redde
Гор та	rgin	0.40	Fit to page h	eight
Bund m	argin	0.60	Luk <u>r</u> apport n	iår udskrevet
	Hent Printer min	imum	🗖 Open report l	by s <u>t</u> art

10. The printer setup

3.1.1. The TEST button

When TEST is pressed one page is printed on the selected printer showing the margins and resolution used.

The corners on this testprint are marked with a grid where the margins should be shown as a solid line. As printers seems to behave very different you should check the following before trusting the driver settings:



11. Test button, CAVE before trusting printer

3.1.2. The ADVANCED Button

The ADVANCED buttons are used to setup the new facilities for form print and print archiving.

Formular filnavn		
PIP Print arkiv navn	c:\keepit\kept	
		<u>F</u> ortryd

12. The advanced button in the printer setup

3.2. Forms

The formula file should contain a picture in WMF format, which then will be extended to the full paper size (without respects of any margins and with stretching the image to fit both directions) and printed transparent behind all other text on all pages.

As an example you may try to enter one of the picture files from the TRIO demo system, which may be stored as

c:\swtools\demo\wmf\0101.wmf

You should note, that the form is output to the printer for each page, this may reduce the speed of printing drastically on some printers.

If possible for production runs, use any macro language for the printer to download the form fixed into the printer memory as described in the individual printer drivers manuals.

3.2.1. Creation of forms

To create a form you may use any picture program able to save in WMF format, Microsoft PowerPoint could be a candidate here.

The reason for using the WMF format is because it is based on vectors, e.g. the drawing may be scaled without loosing its resolution. However, it is also possible to use any of the other supported pictures format, such as BMP, GIF, JPG etc.

3.2.2. Controlling the form print from the calculations

It is also possible to control the form printout from the calculations, that means a report may use different forms on the pages printed.

PRINT(FORM=c:/swtools/demo/wmf/0101.wmf)

will change the form to be taken from the WMF filename given.

The PRINT(FORM= should be placed in the FIRST section if the form is to be used from the very start. If placed in the NORMAL section, the form change will take effect, when the first line on the nextcoming page is printed.

3.2.3. Handling of forms during the layout definition

As soon as a form has been setup for a printer you may select this printer in the layout function which will then show the form in background according to the printer page size.

3.3. PIP Print archiving

Setting a PIP (Print zIP) archive filename causes all printout to this printer to be archived into filename.zip and a printoverview file filename.ssv to be builded. An example may be:

c:\keepit\kept

If the directory c:\keepit is not present, this will be created. Note that the first character of the filename must be a letter. You should omit the file extension as this is set to zip/ssv

If you omit the path from the filename, the database path from the setup preferences will be used.

If the filename is 4 characters only or less, YYMM will be added when archiving to keep filesizes low and ease deletion of old print. The above example will produce the files

c:\keepit\kept9908.zip c:\keepit\kept9909.zip

c:\keepit\kept.ssv

The print archiving may also be controlled from within the calculations of a report without defining this on the printer setup, see the PIP function later.

Print archiving may be defined for a screen printer also so a physical print is produced only as a reprint from the archive.

3.3.1. Screen printer display when using PIP

When you are using PIP print archiving for a report printout, the VIEW button will be activated even if the output is not printed on a screenprinter, as the screenprinter files have to be made anyway for the print archiving.

That means you get the double function of printing and in the same time viewing the output on screen.

3.3.1.1. Screen printer display without using PIP

You may specify the making of screen printer files for a printer without actually archiving the print by entering the

PIP Filename as just -

the print is not archived but you get the VIEW possibility.

3.3.2. Recalling an archived print

The report statistics startlog will show start-endtime for a run, if print has been collected the is replaced by + as start+endtime, by click on the endtime you will get the print on screen and may reprint all or selected pages. The reprint may be done on a different printer type as the print will then be resized to this, but please observe that differences in page setup and field scaling may heavily influence the print.

Note that the + mark indicates only that a print was collected, not necessarily that the print is still present, as somebody may have made a periodically cleanup of the zipfile in which case the print of course cannot be displayed.

As the startlog holds the last 100 starts only the recall possibility will be pushed out after more than this number, as is this recall restricted to report start and not other print such as data dictionary definitions.

However you may define the SSV file made by the print archiving for an IQ program, use this for searching a specific print and display it with the calculation function SCRPRT, see later.

3.3.3. Report start statistics

The report start statistics is now included as a part of TRIO without a licence for user administration has to be present. For a full description you should refer to the last chapter in the user administration manual.

Dags dato:		okumentation art af <u>D</u> enne	Printer:	Cano	on Caps	l	•
Pr. Dato:	and the second se	art af <u>A</u> lle	h à	Inde>	c.		
Start fra:		a ælg kø			c+Liner		
Stop ved:				02:M	od+Va+	Lic+Dato+U	
	-	Newpage 🛛	1	<i></i>			
Dato	Start Slut	DD	PD	Para	metre		
01.11.99	11:09+11:10		01.11.99				
	11:08-11:09		01.11.99				
	15:55-15:56		29.10.99		1		
500964300887809098	15:44-15:48				1		
29.10.99	15:42-15:44	1 29.10.99	29.10.99	, ,	1		
29.10.99	15:33-15:35	29.10.99	29.10.99				
27.10.99	14:38-15:00	27.10.99	27.10.99				
27.10.99	14:36-14:38	27.10.99	27.10.99				
26.10.99	11:32-11:34	26.10.99	26.10.99				
21.10.99	15:02-15:04	21.10.99	21.10.99				
21.10.99	15:01-15:02	21.10.99	21.10.99				
20.10.99	14:40-14:41	20.10.99	20.10.99				Teen
28 48 00	46-90-46-66		28 48 00				
		Sorte	ring!		Kø	<u>0</u> K	<u>F</u> ortryd

13. Start of a report showing the report statistics

3.3.3.1. Use of the report start statistics

By click on one of the statistic lines different functions is achieved dependent on where the click is made:

- Startdate gives details of this report
- Starttime gives run statistics for this start
- Endtime displays the archived print if present (marked with +)
- Anywhere else duplicates the parameters with/without the dates

The PIP print archive file and number will be shown also on the report detail information you will get by clicking on the date field on the line:

Jobnr.	330	Dags dato	1999.11.01
Start dato	1999.11.01	Pr. dato	1999.11.01
Start tid	11:09:59		
Slut tid	11:10:31	Start fra	
Tid anvendt	00:00:32	Stop ved	
Records læst	35.684		
Sider printet	3	Data 1	
Status	2=Færdig	🚽 Data 2	
Printer	9=Canon Capsl	🚽 Data 3	
Index	0=Standard	🚽 Data 4	
Total	0=Alle	🚽 Data 5	
Faldende sortering	0=Nej	🚽 Data 6	
Prioritet	50	— Data 7	
PIP Id	c:\keepit\kept9911,	.1	
			<u>OK</u> <u>Fortryd</u>

14. Display of report details with the PIP id

3.3.4. Structure of the PIP files

The print will be stored in the same way as for the screen printers output in one or more compressed ZIP-files.

Each print session is numbered taking the next free number from the zipfile, the printsession number nnnnn may range from 00000 to 32000.

Each printpage will be stored as a file nnnnn-NN.NNN in the zipfile, nnnnn being the printsession number, NN.NNN being the print page number within the printsession. These filenames are 16/32 bit compatible.

Any chart on the report will be included in the print archiving also, but you must note, that pictures and OLE objects may be stored as references to an external file, not packed into the print archive itself.

To get a proper display of the archived print such external files must be accessible also when the print is recalled. However to enable moving of the print archive files between different machines, if any file is not present, TRIO will search in the following paths also:

- The database path as given in the preferences
- The TMP path
- The current path given when the program was started
- The report definition path
- The path of the TRIO programs itself

If not found anywhere, the display will just be left out without warning.

3.3.5. The SSV Printindex file

Also a printindex SSV textfile will be builded with one line for each printsession and the fields:

- Printsession number within the zipfile
- Date printed
- Report number
- Report name
- Additional user-controlled informations given in calculations
- (as customer number, name, invoice number, date)

As an example the ssv file could contain:

SW-Tools

1;19990715;dm1001;Article report

2;19990715;dm1008;Invoice

3.3.5.1. Defining the printindex for individual print recall

If you want to use such a printindex file for searching and display with IQ you must first make a file definition like:

8.64											_ D ×			
Fil ID:	n: [c:/keepit/kept					PIP Print archive SSV Textfile				-				
Filnavn:								Standard	ID:					
Placering:														
Filtekst:	PIP	Prin	l archive		_									
		(oltr					_		_					
	Fe	2010-00-	4. Recor	dlæn	gde	See Tra						1000		
		Nr	Navn				Format		Byte Lay	out		-		
		1	PIP 1d				5,			99999				
		2	Dato				.8.		99	199.99.99		- 21		
		3		Program	r)			. <mark>6</mark> . 8		>000	00000			
	•	4	Text			_	32		2000	000000000000000000000000000000000000000	x00000000000			
		5		- 1	nde								- D ×	
		7	-		Nr	Indexnavn		File	Dir	Keydefinition				
		8		188	1	PIP Id			01	2.1.D			10	
		9			2									
i i		10			3	1								

15. A standard definition for a PIP file

Note the index definition of 2,1,D causing the print to come in date order, the newest print first.

3.3.5.2. Calculations in IQ for individual print recall

Then define an IQ program on this file as pi#1-99L on listform and add the following calculations:

Beregninger:010 PIP Print archive	
Ved klik på et felt	N1 PIPId Kpi001 -
Rem #10,11 and 12 are Textfields of 128 characters	Rem #10.11 and 12 are Textfields of 128 characters
#10-#2 using "&&&&&&&" /* Take the date to a workfield	Mork=Dato using "&&&&&&& /* Take the date to a workfield
#11-#1 /* This is the PIP 10	Mork=PIP 1d /* This is the PIP 1D
#12~filename() /* Take the filename of the printin	Command-filename(PIP Print arkiv) /* Take the filenam
#12=#12(1,len(#12)-4),#10(3,6),",",#11 /* keep99900,PIPID	Command-Command(1,len(Connand)-%),Work(3,6),",",Work /* keepYYP
scrprt(#12, "1,1,-1") /* Displayit	scrprt(Command, "1,1,-1") /* Displayit

16. Calculations for PIP print recall

The SCRPRT function gets the first parameter as PIP id

c:/keepit/kept9908,1

and the second parameter controlling the display (see functions later) as:

1 = Start display on page 1

1 = Display in window

-1 = Zoom factor, zoom out once to reduce size

which gives the result:

3.3.5.3. The IQ program for PIP print recall



17. The IQ program for PIP print recall

3.3.5.4. Calculations in IQ to ease searching

You may add the following lines to the IQ program

Beregninge: 010 PIP Print archive		_ D ×
Ved valg at funktion	Læs denne record	FU0505 •
<pre>i if #1QIncha=0 return /* Alpha> SUPERINDEX i if #KEY<"A" return dofunction(510,#KEY) return(-1)</pre>	<pre>_ if IQIncha=0 return /* Alpha> SUPERINDEX if KEV<"A" return dofunction(510.KEV) return(-1)</pre>	

18. Calculations in IQ program for PIP print recall

by which IQ will switch to SUPERINDEX automatically when a letter is entered as searchkey, whereas a number input goes as normal to index search. Such routine may be used in general in IQ programs.
3.3.6. PIP Print archiving controlled from within the calculations

The calculation function PIP for print archiving has been introduced as:

PIP (fields, filename [,optional pages])

You may use this function in a report to switch on the print archiving for a report instead of for a printer. The PIP filename does not have to be set on the printer, if it is set anyway the calculation specification will overrule this. As an example:

LAST

PIP("#1-3", "c:/keepit/kept")

will archive the print and place the contents of field 1,2 and 3 in the printindex file (kept.ssv).

The first field in the printindex file will always be the PIPID or printsession number as to retrieve the print. If the filename given is 4 characters or less so that YYMM is added, the date YYYYMMDD is inserted as the next field. After this follows the fields you state for the PIP function or, if nothing stated, the report number and name.

The PIP function may be used in the NORMAL section of a report also to archive all pages printed since the last call of PIP. This means you may call PIP after finishing printing an invoice to get the invoices separated in the print index for searching by the print recall.

The last PAGES parameter of the PIP function may be used for further control of what to archive, could be totals only from a huge report, but should normally be left blank. See the PIP function description for details on this.

If a report results in more separate entries in the print archive, like one for each invoice, the last one of these will be displayed by clicking on the endtime in the start log.

3.3.7. Cleanup of old print

In our example above the zipfiles was named keptYYMM.zip, if you need space quickly it is just to delete the unnecessary old files from the disk.

However the correct method is of course to make a report on the printindex file deleting all old records and in the same time removing these from the print archive ZIP file. For this we need the ZIP function which we pass the zip filename and PIPID, together with the mode -d for delete and -q for quiet operation to ignore all error messages:



19. Calculations for a PIP cleanup report

The freefields 11,12,13 and 14 used above are all textfields of 128 chars. The field #10 will be 0 if the zip entry was deleted or 1 it not deleted.

3.3.8. PIP Locking and error handling

During the print archiving the printindex SSV file is of course locked, if more users try to archive at the same time to the same file the last one will get a warning and will have to wait until the first is completed.

To speed up the archiving, control is not handled back to Windows during the ZIP packing which may cause a short pause during the archiving.

The ZIP function itself may give error messages as disk full or report problems with the zip file.

4. Report layout definition and tuning

4.1. The layout function

The layout function has been modified on several levels. Most importantly, the rulers and alignments now support use of centimetres, inches and points.

4.1.1. New layout when report is defined

In previous versions it was almost impossible to select the same starting position of a field on the next line as on the line previously defined. This is now solved.

The box size calculated by the new report layout will now match the box size calculated later on in the layout function.

Please refer to the new preference for further details.

4.1.2. Autosize of fields

All TRIO standard reports will as standard insert fields with the option 'Autosize box' width and height (both included).

4.1.3. Alignment

When inserting or moving fields in the layout it is automatically aligned horizontally. If this is not required the checkmark of the new option in menu

File, Edit, Align to column may be removed.

4.1.4. Auto scroll when moving, inserting items in layout

The layout function will automatically scroll the layout when the mouse cursor reaches the edges of the layout window while moving or inserting items.

4.2. Layout preferences

The layout function contains a preference dialog. It is activated through the menu

File, Preferences... and allows you to setup how you need to work with the layout. The changed settings will be saved individually on each report.

Gitter	
☑ <u>S</u> ide ramme	
🗖 <u>B</u> enyt linie højde i stedet for skr	ift højde
Vertikal enhed	20
Horisontal måleenhed	pixels 💌
Horisontal lineal enhed	1
Horisontal justeringsenhed	20.00
Vertikal måleenhed	pixels 💌
Vertikal lineal enhed	1
Vertikal justeringsenhed	50.00
<u>0</u> K	<u> </u>

20. The preferences in the layout function

4.2.1. Display options

4.2.1.1. Grid

The layout grid is provided as guideline. You may turn this option on and off. How the lines are displayed depends on the horizontal and vertical ruler step.

4.2.1.2. Page frame

The page frame is provided as guideline. It will display the size of the page dependent on the printer currently selected in the layout. It will NOT limit you from exceeding the page when inserting and moving items.

4.2.1.3. Use line height instead of font height

This option is only used in connection with a report. Normally, inserting a field uses the standard font height to set the box size of the field. However, if you want to use the normal line height of a report you may turn this option on.

4.2.2. Vertical position step

The vertical step is only used in connection with the layout of a new report. When you create a new report and do a click on the horizontal measurement bar you change the starting position of the next field to insert. This position will be aligned according to the vertical position step. Doing so makes it easier to get the same starting position of fields when creating reports with more than one print line.

4.2.3. Horizontal/vertical measurement, ruler and alignment

The measurement may selected as

- pixels
- cm
- in
- points

The preference dialog with automatically convert the existing alignment value according to the selected measurement.

The alignment value is used when inserting and moving items within the layout. An item will be aligned according to the value setup here.

BE AWARE that changing the vertical ruler and alignment step to anything but pixels/50 may cause you to insert or move items to positions that DOES NOT correspond to the correct print line used be the report generator.

4.3. Additional picture formats

TRIO supports display and print of the following picture formats

- **BMP Microsoft Windows bitmaps**
- CUT Dr. Halo

DIB - Microsoft Windows Device Independent Bitmaps

GIF - Compuserve Graphics Interchange Format

IFF - Interchange File Format (Amiga Electronic Arts Deluxe Paint)

IMG - GEM Raster files (Digital Research)

JPG/JPE/JPEG - Joint Photograpics Experts Group

LBM - Interchange File Format (Amiga Electronic Arts Deluxe Paint)

- **MAC Macintosh Paint**
- **MSP Microsoft Paint**
- PCX ZSoft PC Paintbrush
- **PIC Pictor PC Paint**

RAS - Sun Raster files

TGA - Targa TrueVision Files

TIF - Tagged Image File Format

WMF - Windows Meta-files

However as there may be different variants of these picture formats, it is just impossible to test and support all formats in all variants, especially with respect to different types of compression. In case you experience problems with any type it may be necessary to convert into one of the other types or save with different compression level.

You should note that display of pictures might be of essential better quality and faster in the 32 bit version than the 16 bit version can do.

4.3.1. Scaling of pictures

Pictures may be displayed either as

a. Filling out the box given in the layout, which means the picture is stretched in both directions or

b. Sizing inside the box as large as possible, but keeping aspect ratio of the image, which may cause either left side or bottom of the box to be left blank.

Varenr	0101	Billede af denne vare
Navn	CHOKOLADESTÆNGER	
Salgspris	2,00	
Købspris	1,50	
Sidste købspris	01.01.95	
Lev.nr.	271	
Gruppenr		
Beholdning	100	
Lagerværdi	150,00	

21. Picture displayed with or without maintaining the aspect ratio

For the time being, the WMF is always displayed according to rule a, all other according to rule a or b.



22/11/01 / 2022-09-01 008.384

4.3.2. Animation of pictures

You may create an animated picture in IQ just by displaying the same picture field multiple times with different contents, note this requires a rather fast PC.

The DISP function to redisplay one or more fields as DISP(#30) ensures that a field is redisplayed after calculations is done, before any new input is made. For picture animation you will have to add the U option as DISP(#30U) to get the screen updated straight away without waiting until next input.

4.4. The database window, display and search

The database window include settings for which information to display and how to sort the information within the window. Furthermore, it is possible to search the entire data dictionary for fields or tables.

4.4.1. The display and sort of the database window

The options you may setup for the database window is found in the menu

View - Options...

when the database window is active.

Vis tabel	Vis felt
1=Navn 2=Standard ID 4=Type	1=Na∨n 2=Format 4=SQL-na∨n
l Sorter tabeller efter	Sorter felter efter
0=1D	▼ 1=Na∨n ▼
	<u>O</u> K <u>F</u> ortryd

23. View and sort options of the database window

Apart from always including the table id, the view/and sort of tables include

- Name
- Text
- Standard ID

Field always includes field numbers, but may also view and sort

- Name
- Format
- SQL name

If the option of viewing fields includes field format the database window will display the following:

are med billede	_ (C) X
rtotek	
24	
24	
384	
24	
.8.2	
2.	
all second se	/are med billede artotek 24 384 24 384

24. Database window including field format

4.4.2. Searching the database

When searching the database definitions, it is possible to find tables and/or fields. The search option is selected when the database window is active in the menu h

Edit ·	 Searc
--------	---------------------------

Søg	2=MATCHES/Som indtaste	Søg efter tabel	
Søg efter tabelinformation	1=Navn 2=Tekst 4=Standard ID	Søg efter felt	*dato
Søg efter feltinformation	1=Navn 2=Format 4=SQL navn		

25. Entering the search criteria

The search is performed according to the search method selected, which may be

- As entered
- Case-sensitive
- MATCHES/As entered
- MATCHES/Case-sensitive

The MATCHES allows you to work with part of text following a specific syntax. The syntax is based on the use of some special characters

* = any text

? = any one character

For example, the database definitions may have several tables, where fields are defined as dates. However, only searching after the text

date

will not find a field in upper case if the method is as entered. Also, it will not find a field date of last purchase

If using the method MATCHES/As entered and searching for

date

it will find any field having date within the field name, e.g. any text followed by the text date and ending with any text.

Sog et	iter - Felter: *da	nto Fundet: 6					
Tabel	Navn	Tekst	Standard ID Type	Felt	Navn	Format SQL navn	
cu	dm-cu	Kundekartotek		5	Forfaldsdato	,6,	
pi	c:\keepit\kept	PIP Print arkiv	6	2	Dato	,8,	
sy		Systemfelter		1	DD Dags dato	.6.&	
ву		Systemfelter		2	PD Pr.dato	,6,&	
sy		Systemfelter	8	5	SD System date	,6,8	
va		Varekartotek		5	Sidste købsdato	.6.	

26. The search result shown in the database window

4.4.3. Display of used files only

This option is activated from the file menu when the database window is active.

You may select to show used files only for the program in order to get the overview of needed files as short as possible.

4.4.4. Actions by click on a field in the database window

When defining selections or calculations you may click on any field in the database window to get the full field definition shown. By selections the field will be inserted in the current selected box on screen also.

4.4.5. The function parameter wizard help

By using the function parameter wizard by calculations (ctrl.Q), you may go directly to the windows manual section for this function by selecting HELP (F1).

5. IQ

5.1. GRID listboxes

The GRIDHDR and GRIDFLD function has been added.

up no	Stock k 🔺
9	

27. Sample use of GRID



28. The GRID calculations



29. The GRID field in the layout

5.2. DGRID for simple data selection

The subfunction DGRID may be used to select a record from a dialog box which will block the current application until selection has been made.

For example, by entering the following calculation by click on a field in a IQ query

DGRID("va!1-2,6!1!0!Select an article",#50)

will read records from the article file 'va' and display the fields '1-3' which is sorted according to the index number '1'.

The function will return the value of the displayed field '0', e.g. field number 1 because

Displayed field	Field
0	1
1	2
2	6

which is stored in field #50. Finally the dialog title is set to 'Select an article'.

Article no	Description	Supplier no
D101	CHOCOLATE	271
0102	LARGE MACHINE	100
0110	BUS	123
1001	MONEY	205
1005	MACHINE	100
2001	CREDITCARD	205
2002	ID-CARD	205

30. DGRID dialog

For more information please refer to the DGRID subfunction.

5.3. SCROLLBAR object

The scrollbar object may be used to display numeric values from 0 to 32767.

To make a scrollbar field you may define a work field named 'Scrollbar' with format '6,' and change the object type in the IQ form to 'Scrollbar' when inserted.

Form:020 test scrollbar i		8	<u> </u>									L.	- 🗆						
	dth: 975 ight: 69		[21,441,996,510]								#12 Scrollbar								
0 100 200 300 4	00 500	600 1700	1800	900	1000 1	100 120	0 1300	1400	1500	1600	1700	1800	1900	12000	2100	1220			
Varenr koo	x I		1	1		1		1	1	1	1	1	1	1		1			
Navri () jooo	000000000	000000000	<u>(</u>			1	1	1	i.	1	1	1	1	1	1	1			
Salgspris 999	9999,99		1				1	1	1		1	1	1	1	1	1			
Købspris 🔰 999	9999,99	[]	1	7	1 1		1	i]	1	1		[1]	1			
Sidste købspris 99.	99.99			1			1	1				1	1	1	1				
Lev.nr. box		+ + 1 1		1	1 1		1	1	1	1		1	1	1	1	1			
								1					÷	1	1				
		1	1	5	999	k-		1		-!	-!	1	1	1	1	-!			
: : : : الس	Ĩ.	<u>P</u> en		•	_					-1		· · · · · ·		 1		-1			
	CANA .	C <u>o</u> lor		•	$-\frac{1}{1}\frac{1}{1}$			1		1	-1	- <u>1</u> T	1	$\frac{1}{1} =$					
		<u>I</u> ext Select fo						÷					+	+					
·		<u>J</u> ustify	filos:		-!!-	}-		- '		-1			γ ¹	+ +		-1			
									J					1					
· + +		Bring to J			-1111111				4	-1			÷	¦	4	-1			
· · · · · · · · · · · · · · · · · · ·		Bring to J	T									÷	ł						
		B <u>a</u> ckgro	und item			1 k-	l	1		1			İ	1		1			
		S <u>h</u> adow	·					'								1			
) atabase:020_test_scroll	bar ig	3D <u>d</u> owr 3D <u>u</u> p ef		í											1	. (0			
Varekartotek		Black bo																	
990 C		Box					2 F						-						
	-			122			@Free @Free						Free) Free						
	-	Field set	ings				@Free						Free						
Navn		Object ty	ре	Þ	Button		@Free					25 @	Free						
Navn Salgspris Købspris					Object attributes			Combo	box	ØFree					26 @	Free			
Navn Salgspris Købspris Sidste købspris		Object a			22		100 C 100 C 1												
Varenr Navn Salgspris Købspris Sidste købspris Lev.nr. Gruppenr					<u>E</u> ditbox Listbox	e	@Free @Free						Free Free						

31. Scrollbar inserted in a IQ/DM form

When using a scrollbar in IQ the following calculations are required:

- Setting the maximum value using ObjectAddString()

- Getting the current position of the scrollbar using ObjectGetString()

As an example you may define the work field #12 as 'Scrollbar' with format '3,' and add the following calculation by start of program

ObjectAddString("#12","100","")

which will set the maximum position of the scrollbar to 100. Then a calculation by click on field #12

#12=ObjectGetString("#12")

in order to retrieve the current scroll position.

When using the scrollbar object in DATAMASTER you do not require to use the ObjectGetString() to retrieve the current position, because DATAMASTER does this automatically by setting the value into field #12.

6. The datadictionary

6.1. Long datadictionary file ID

The 2 character file ID has been extended to a maximum of 8 characters.

		2012			*			-		_ D X			
Fil ID:	sup	plier	Lever	andø	kartotek		SSV Textilie						
Filnavn:	Ē					120	Standard II):					
Placering:	dýssvdemo/dan/isa/supplier.ssv						ir —	_					
Filtekst	Lev	/eran	dørkart	otek									
		Felle	1				¢.	-					
	Felter=6, Recordiængde=0												
	5	Nr	Navn			Format		Byt	Layout	-			
		1	Lev.m	4		3B4K			xxx	100			
		2	Navn			24			000000000000000000000000000000000000000	0000000			
		3	Adres	9 C		24			000000000000000000000000000000000000000	0000000			
		4	By			24			000000000000000000000000000000000000000	0000000			
		5	Valuta			2,			99				
		6	Saldo			.8.2			-99.999.999.99				
		7 8		In	dex	-					. 0 ×		
		9		N	r Indexnavn		File	Dir	Keydefinition		-		
		10		1	Lev.nr.			01	1				
		11		2	Lev==>Valuta		CURRENCY	01	5				
		12		3	Lev==>Vare		ARTICLE	02	1				
		13	-	1 3	1000 C			-					

32. The demo supplier file with long file ID

Note that connections, READ(....) and all file/field access in general is extended in this way, and use of fileIDs longer than 2 characters is in no way backward compatible with previous versions, also with respect of any Unix server.

In calculations you may then give fields as:

va#47=1 customer#47=1 invoice#47=1 invoice#statcode=1

The use of upper/lower case letters for the same file multiple times in a single program is limited to the 2 first characters only, (auftrag/AUFTRAG/Auftrag/aUFTRAG), more than 4 times the same file is not considered relevant.

On 32 bit systems you may even create fileIDs with up to 32 characters, but this is not recommended as all compatibility with the 16 bit version will be lost.

A conflict with old TRIO programs and long filenames exists in the syntax in read of files, where the connection is stated explicitly, as READ(va.le), the old syntax READ(vale) without point is still supported unless a long fileID 'vale' really is present.

6.2. Datadictionary fieldnumbers

Each fieldnumber in a file may be stated separately independent of the real sequence, as a new column in the FDF has been added for user-defined fieldnumbers:

at Novri		natural inscissal				
pe	farekartotek		SSV Textfile	e		
U E	, Recordlængde	:=0				
bel	Java	Format		Byte	Feltnum	we 🔺
uriabel.	arenr	4B4K				1
	avn	20				2
tekst	algspris	6,2				00
cimal dump	øbspris	6,2				01
dunp	idste købsdato	,6,				02
np:	ev.nr.	13				01
e.	ruppenr	2.				00
Colorest	choldning	-6,				00
ecord	Iternativ lev	3,			11	02
oversigt	rifelt	-6,2				3
rede ord	De lott	4				
	Nr	Indexnavn	File	Dir	- ar	Keydefinition
	1	Varent	1.00	01		1
	2	Leverandørnummer		82		101,1
	3	==>Varegruppe	GROUPS	01		100
	4	==>Leverandør	SUPPLIEF			101

33. Amending the fieldnumbers in the datadictionary

In the database window the fields are shown sorted by the new sequence and all references go to the new field number, for example should the db now be calculated as #310=#201-#200

article	Varekartotek						
1	Varenr	300	Beholdning	309	@Fri	318	@Fri
2	Navn	381	@Fri	310	@Fri	319	@Fri
3	Frifelt	302	@Fri	311	@Fri	320	@Fri
100	Gruppenr	303	@Fri	312	@Fri	321	@Fri
101	Lev.nr.	304	@Fri	313	@Fri	322	@Fri
102	Alternativ lev	385	@Fri	314	@Fri	323	@Fri
200	Salgspris	306	@Fri	315	@Fri	324	@Fri
201	Kabspris	307	@Fri	316	@Fri	325	@Fri
202	Sidste købsdato	308	@Fri	317	@Fri	326	@Fri

34. The database window after fieldnumbers has been amended

Note that workfields are numbered as usual after the last used field in the file. The maximum number of fields in one file is still 999, but fieldnumbers may be up to 2.000.000.000 in the 32 bit version. The 16 bit version is restricted to maximum 65000.

6.3. Datadictionary standard field formats

A field format may be stated as AMOUNT, the real format will be taken from the file FORMAT if present by searching for a fieldname Amount.

6.3.1. The standard FORMAT file

To activate the standard field formats, just create a file named FORMAT in your datadictionary like:

8411				
Fil ID:	format	Standard feltformater	 SSV 	Textfile
ilnavn:	Felte	н	22	- · · · ·
Nacering:	Felter	=6, Recordlængde=0		
Filtekst	Nr	Navn	Format	Byte Layout
2000	1	Debitornr	4,	9999
	2	Kreditornr,Leverandoer	3	XXX
	- 3	Varenr	4	20000
	4	NAVN	24	300000000000000000000000000000000000000
	5	Belocb	,6,2	-999.999,99
	6	Dato	,6,	99.99.99
	7		1 0.5 C	1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

35. Creating the FORMAT file with standard formats

The fieldnames given here will be the standard formats, these must be alphanumeric without special characters, upper/lower case does not matter. You may state synonyms by separating these by comma as shown for supplier.

The field formats may contain bytenumbers, packtypes and other options just like a normal field format.
6.3.2. Defining a file using the standard formats

You may use these standard formats when defining a file like:

811				그미지	
Fil ID:	article	Varekartotek	✓ SSV Tex	dile 🔹	
Filnavn:	Felte	1	1		
Placering:	Fetter	=10, Recordiængde=0			
Filtekst	Nr	Navn	Format	Byte Layout	
	1	Varenr	VARENR B4K	3000X	12
	2	Navn	NAVN	x0000000000000000000000000000000000000	111
	- 3	Salgspris	BELOEB	-999.999,99	10
	4	Købspris	BELOEB	-999.999,99	1
	5	Sidste købsdato	DATO	99.99.99	
	6	Lev.nr.	LEVERANDOER	XXX	
	7	Gruppear	2,	99	
	8	Beholdning	-6,	-999999	
	9	Alternativ lev	LEVERANDOER	xxxx	
	10	Frifeit	-6,2	-999999,99	
	11				1

36. The demo article file using standard formats

The standard format is used when a field format starts with an alphabetic character. The standard format name goes up to the first space met, after this you may state additional options for the field as shown for the first field with the K=Key and B4=Bytenumber 4 options added.

6.4. Integration between different database systems

As it is being more common to have different database systems on the same equipment, it is possible to define these completely separate but still access and mix these from within the calculations.

A qualifier stating the ID of the database followed by underscore may be stated in front of any fileID as:

comet_invoice = Filedefinitions COMET, file INVOICE
alx_customer = Filedefinitions ALX, file CUSTOMER

Which may be used in calculations as:

alx_customer#47=1 READ(comet_invoice),alx_customer#47 comet_invoice#statcode=1.

6.4.1. The database system IDs

A file containing the database systems ID (BASID.SSV) states the connection from a fileID like 'comet_xxxxx' to a directory with the file definitions (FILES.SSV/xxxxx.SSD and BASIS.SSV) for the database 'comet'.

The BASID.SSV file must always be placed on the same directory, as where the BASIS.SSV file with the drivers are found for this database.

6.4.1.1. Creation of database identifications

You reach the database ID's from the FDF subsystem menu:

Yindue Hjælp	7	
Goret ny li ôben îl		
Database interface		
Opsæhing.		
Şubiyslen 🕨	Aben.	
Luk Ak+F4	Nyt Ændre Slet System Her	
	Finne 11 Kodetabeller .	
	Database dentitivationet	

37. Selection of maintenance of the database ID's

wherefrom you get the following screen:

	ID	Beskrivelse	Sti	
	ALX	Alx system	d:\alx\dmf	
	COMET	Comet system	d:\comet\dmf	
	DANISH	Dansk demosystem	d:\ssvdemo\dan\dmf	
	GERMAN	Demosystem på tysk	d:\ssvdemo\ger\dmf	
•	NAVISION	Navision Financials system	f:\navi\dmf	
2	<u>S</u> let		<u>OK</u> <u>F</u> ortryd	

38. Maintenance of the database ID's

Note that the database ID is alphabetic and uppercase (A-Z) only, you cannot use digits or special characters.

6.4.1.2. The database window when BASID is activated

When more database ID's is present in the system these will show as menu items in the file menu for the database window:



39. The database window file and database selection

When you select for example the COMET database, you will get this as:

comet	_a0 Angebots 00/ Kopfsatz				
comet	a0 Angebots 00/ Kopfsatz				
	a1 Angebots 01/ Kopffolg				
	a2 Angebots 20/ Pos-Satz				
	a3 Angebots 21/ Pos-Folge				
	a4 Angebots 40/ Fußsatz				
	a5 Angebots 41/ Fußfolge				
7	Anzahl off.Positionen	26	Nachfaßdatum	45	SNR Hauptdeb.
3	Priorität	27	Übernahmedatum	46	RES
3	Portnr.	28	Datum letzte Änderung	47	Ausgabecode
0	Zahlungskondition	29	Statistik-Code	48	Verarbeitungscode
11	Vertreter 1	30	Auftragsnr	49	RES
12	Vertreter 2	31	Höchste Positionsnr	50	Read me
13	Formular-/Sprachencode	32	SNR Div.Debit.	51	050
4	Anzahl Druckwdh.	33	SNR Lief.Anschr	comet	a1 -=>Angebots 01/K
15	Lieferbedingung	34	Gesamtwert brutto	comet	a2 -=>Angebots 20/ P
16	Versandart	35	Gesamtwert netto	comet	a6 -=>Angebots 42/ D
17	FremdwCode	36	Gesamtwert rabattf.	comet	b7 -=>Anschr 00/ Lie
8	Gesamtbasisrab.	37	Kennleiste Gesamtangebot	comet	b8 -=>Anschr 10/ Ver
19	Gesamtwertrab.	38	Maskennr.	comet	b9 -=>Anschr 20/ Div

40. The file, field and connection selection in the database window

6.4.1.3. The fixed database ID's MAIN and SYS

TRIO will always add two ID's:

- MAIN

- SYS

MAIN you may use to return from a selected database to the original.

SYS is more for programmer's use, where special system fields may be added. This is also used internally by TRIO itself.

6.4.2. File connections spanning over different databases

In the FDF standard file connections may be defined to other database systems, as seen above in the database window the connected file is just stated as BASID_FILEID to get another database.

6.5. Datadictionary calculations / Stored procedures

Each file or field definition may be associated with one or more calculation blocks held in the datadictionary itself. These stored procedures are defined by:

Fil definitio	ner (article Varekartotek)			- 8 2
Contraction of the second second	er Vindue Hizelo	and the second se		
12 House	regringer			
Fil ID:	article Varekartotek	SSV Textfile		
Filnavn:		Standard ID:	0.071	
Placering:	d;/ssvdemo/dan/isa/article.ssv			
Filtekst	Varekartotek			
	1	lokumentation		
-				
-			-	

41. The new calculation icon in the data dictionary

Like the present IQ calculations the calculation block name decides, when the specific calculations should be executed, e.g. by READ or by WRITE of the file.

Beregninger:000			
Efter læsning	*	Varekartotek	ZARTICLE000 -
Efter læsning		1	
Før tilbageskrivning	· · · · · · · · · · · · · · · · · · ·		
Før indsættelse	1		
Før sletning			
Før hent felt			
Efter gem felt			
Far visning			
Efter input			
Før input			
Efter klik på felt			
Før åbning af			
Efter åbning af			
Før filenavn			
Efter filenavn			
Før lukning af			
Efter lukning af			
Standard record	12.0		

42. Selecting where to calculate for a file definition

When the calculation block is selected, you may select a single field also:

Beregninger.000		_ D ×
Efter læsning	+ Varekartotek	ZARTICLE000 -
(- Varekartotek	ZARTICLE000
1	#1 Varenr	ZARTICLE001
	#2 Navn	ZARTICLE002
	#3 Frifelt	ZARTICLE010
	#100 Gruppenr	ZARTICLE007
1	#101 Lev.nr.	ZARTICLE006
	#102 Alternativ lev	ZARTICLE009
	#200 Salgspris	ZARTICLE003
	#201 Kabspris	ZARTICLE004
	#202 Sidste købsdato	ZARTICLE805
18 11	#300 Beholdning	ZARTICLE008

43. Selecting calculations for a single field or the complete file

6.6. User definable subfunctions

Common blocks of calculations may be defined as a subfunction like the function descriptions which comes with TRIO in the files 00-99.

These files are made like normal file definitions, but may hold function definitions and documentation of internal TRIO functions and external DLL functions which may be made by other programmers.

From version 008 you may now also define your own set of functions as common calculations, which may be modified and parameterised when loaded.

6.6.1. Selecting the function definitions

You reach the function definition files when the FDF program is switched into the SYSTEM FILES mode:

Fil definitioner		. # X
🖸 Yindue Hizelp		1997
Goret ny lil Åben fil		
Database mettace		
Qosething.	41	
Subsystem •	Aben	
juk Akefé	Nyt Kindra Sjol System Her	
	Figna (k. Kodetabeller	
	Database [dentilkatione:	

44. Selecting the SYSTEM FILES mode in the FDF

which enables you to maintain / create file definitions starting with a digit, which is normally blocked in the FDF.

You should change/create filedefinitions in the range 50-59 only to avoid conflict with this and future TRIO releases.

6.6.2. Creation of new functions

First the functions are created just as fields in the datadictionary, the fieldname becomes the function name and the field format states how the return value is given:

12 m		14		<u>I</u>				
Fil ID:	I ID: 50 My own Subfunctions		SSV Textfile					
Filnavn:			174	Standard ID:				
Placering:	d:/s	svde	mo/dan/isa/50.ssv	1				
Filtekst	Min	e eg	ne subfuktioner					
		Felte	1					
-	- Fe	elter	2, Recordlængde=0					
		Nr	Navn	Format	ŧ	lyte Layout		-
	- 18	1	Varedb	.9,2		-999.999.999,99		
	1.0	2	Taelvarer	4,		9999		

45. Creating new functions in the subfunction definition 50

The function- (field-) name must be plain alphabetic, no spaces or special characters is allowed. Upper/lowercase does not matter.

The calculations for the functions is then entered as the datadictionary field calculations:

GFil definitioner (50 Mine egne subfuktioner)		_ # X
Fi Bedger Vis Vindue Hinep		
Beregninger 000		
	#2 Taelvarer	Z50002 ·
<pre>Taelvarer(file,sun) Taelvarer(file,sun) Tsun=0 Start(file),"0000" end(file),"9999" next(file) Sun=sun+1 Tf sun=1 let WW#12=file#2*file#100*file#201 repeat(file) Trepeat(file) Treturn(sun) The sun sun sun sun sun sun sun sun sun sun</pre>	Taelvarer(file,sun) sum-0 start(file),"0000" end(file),"9999" next(file) sum-sum+1 IF sum-1 WW012-file#2+file#100+file#201 repeat(file) RETURN(sun)	

46. Entering the function calculation lines

And the function is now installed and may be used in other datadictionary calculations or IQ as:

🗰 Beregninger:013 supplier Leverandørkartotek		
Ved klik på et felt	M1 Lev.nr.	Ksupplier001 •
Taelvarer(article,#10)	- Taelvarer(article,#18) disp()	

47. Using the homemade function

6.6.3. How it works

The first line of the function definition contains

functionname(par1,par2,...) .

When the function is to be calculated, the code is loaded into the program and any occurrence of par1 replaced by the first given parameter, par2 with the next and so on, whereafter the code is executed just as it was entered in the program itself.

In the above example the first lines becomes by load:

```
#10=0
start(article),"0000"
end(article)
:
```

:

7. External packages and runtime licences

A package consisting of a set of TRIO programs may be made and licensed individually by a certified TRIO distributor.

7.1. Packages

A package consist of one ZIP file named ddddllll.zip containing all necessary files, dddd being the distributor number, llll a package number.

The ZIP file may contain report definitions, IQ program definitions, file definitions, SSV files for parameters and pictures.

7.1.1. Package numbers

When the package number IIII is in the range from 3000 to 3999, the ZIPfile will be crypted and can be used only by customers having a valid license for the product IIII (3000-3999) issued by distributor dddd.

If IIII is in the range 3000-3499 the license procedure for user ID registration is not necessary, 3500-3999 requires a final license to be issued for each PC user ID within 3 months just like the TRIO package.

If IIII is any other number the ZIPfile is not crypted and usable by any TRIO customers with a full license, not just runtime, and the package does not have to be licensed separately.

7.2. TRIO Runtime licenses

TRIO may be delivered with a RUNTIME license, in which case it is not possible to create/amend programs at all, only start of premade programs within a licensed package is possible.

The FDF module will however be fully available also with just a runtime license, as the installation may require individual file setup.

7.3. Activating a package in TRIO

If a package 3002 is made by distributor 4003 the ZIP filename for this becomes 40033002.ZIP

This zipfile must be copied to the customer system, for example to the directory DEMO as $\DEMO\40033002.ZIP$

You may now set any report/IQ/FDF or database path in TRIO to point to this zipfile, either by a user homepath or creating a subsystem as shown:

Navn:	Pakke 3002 DemoDa	n	0002
Kendeord:		Type:	Normal 💌
Firma:		Modul:	RAPGEN & IQ 💌
Fil definitioner:	\demo\40033002		
Database:	\demo\40033002		
Rapporter:	\demo\40033002		
Databaselås:			
Beskrivelse:	DEMO systemet inst	alleret som e	n pakke
	la l	<u>0</u> K	<u> </u>

48. Setting up a package subsystem

Above the file definitions is also to be taken from the package, you may however set these to be taken from the customer own definitions outside the package just by changing the path.

7.3.1. How TRIO handles a package

TRIO will for the above subsystem try to open a file for, say report number 777, like \DEMO\40033002\dm1777.src. If this file is not present and the directory stated is 8 digits, TRIO will check if the package file \DEMO\40033002.ZIP is present, if so the license is checked and the requested file is unzipped and encrypted from here without the user noticing this at all.

If the report is then amended and saved, the directory 40033002 will be created and the real file \DEMO\40033002\dm1777.src will be written. As the file is now present, all further access will go to the amended file and the original file in the package is ignored. The one program has now been moved out from the package and modified for individual use.

This means by later upgrading with a new version of the programs inside the package by replacing the ZIPfile, all individual amendments will be kept unless such files are removed. Also the package may contain a set of standard file definitions, if any file on the customer requires individual setup, it will just be moved out from the package ZIPfile when modified.

7.3.1.1. Package licenses

The distributor 4003 may issue a RUNTIME (or READONLY, which is the same) license for the package, in which case only start of the programs is possible, TRIO will never as described above allow amendments and move a program out of the package. File definitions however may be amended.

The distributor 4003 may also choose to issue a FULL license, in which case the programs may be modified freely if the customer also has got a full TRIO license.

Note that package numbers 3000-3499 do not require user registrations, maximum number is the same as for the TRIO license, 3500-3999 do, and all other numbers do not require a separate license at all and is always for full usage.

7.4. The license input program

A package license is considered completely separated from the TRIO license, and for this purpose the license program has been extended with a menu for selection of distributor:

Lic	<u>S</u> W-Tools	004711		₩ ¥edligeh	oldelse		Version	008.003
Foi	1000 Q4 4003 SW-Tools	00				Dato	991101	
Ku	9999 SW-Tools	ta Coorpo	oratio	on Limited				
Deres	reference	v					1	
Bema	erkning							
Produ	ıkt 🗌		Any	vendelse	Dato	Indtil	Licenskode	Brugere
0109	TRIO 32 Bi	t	5	Runtime	990903]	QQ1301	3
0105	ODBC 32 E	3it	R	Kun læsni	990903		BHDQ47	3
1005	Server RM		2	Fuld	990903		5WXX13	1
2002	X/Basic		R	Kun læsni	990903		ZJJ589	3
<u>+</u> :	Checks	sum 12345	JL 6		<u>)</u> ISK		<u>0</u> K	<u>Cancel</u>

49. Selection of package distributor in the license program

The first menupoint SW-Tools will be present always for the TRIO license, the additional distributors are shown if a distributor license file is present.

7.4.1. The distributors license file

A distributor must identify each package with a package number and a name.

For TRIO itself the license program takes these informations from the file LICENSPR.ENG on the TRIO installation directory, ENG being the language suffix (ENG is also the default if the used language is not present)

The file LI4003PR.ENG must be made by the distributor 4003 and placed together with the LICENSPR.ENG file on the customer system before the package licenses can entered. This file could contain:

SysTec AG 3001;Danish Package 3002;English Demosystem 3003;German Package A002;Voll A005;Runtime A00R;Nur lesen

The first line being the distributor name to be displayed in the license program, followed by the package numbers and names, and finally the usage codes.

7.4.2. Entering the distributor license

When a distributor is selected the license from this may the be entered as:

Licensnr. 99994711 Forhandlernr. 9991 Kunde navn Data Coorp Deres reference Bemærkning Produkt			porati	₩ ¥edligel	noldelse	Version Dato	008.003 991101 Brugere		
			An	vendelse	Dato Indtil				Licenskode
3000	License	package	5	Runtime	990704		9WZHYY	3	
	Package Package	1		Runtime	990704 		QFDHZQ		
± :	Cheo	cksum 1234	156		DISK		<u>o</u> k	<u>C</u> ancel	

50. Two licensed packages from an external distributor

7.4.2.1. DISK input and output of license files

Like for TRIO it is possible to forward license files on disk. For distributor packages the .LIC and .PLS files will get the same name as for TRIO, but have a header line with the distributor number.

By DISK input of the .LIC file in the license program the correct distributor will be selected automatically, the customer does not have to use the menu first.

By DISK output of the .PLS file this information must of course be forwarded to the correct distributor by the customer.

7.5. Preparing a package on the distributor site

The package should normally be contained as source in one complete TRIO subsystem so the only thing to do is to zip the files together with the proper cryptation key and ship the zipfile.

7.5.1. The licensing package

A licensing package containing all necessary programs to enter and issue package licenses will be released for distributors, who needs to create own packages.

This set of TRIO programs contains all elements necessary to enter and issue the distributor licenses together with the package helpprograms.

7.5.2. Making the package ZIP file

In the distributor license package there is a report for this, scanning through the input files and calling the ZIP functions, which will deliver the proper cryptation key for the package number.

😽 Start repo	ort - Expo	ort packa	ige			×			
Parameters	<u>I</u> otal level	<u>D</u> isplay							
Todays da	te: 🛛	: 15.07.99		Printer:	Screen	-			
As of date:	15.07.99			, Index:	_				
Start from:	ſ				01:ld				
Stop at:	Í								
		Di	stributor	9999		eg. 4003			
			kage no.			eg. 3001 eg. Mypack 008.000			
				Trio 008.000 Licenci	ing				
				, d:Iswlicenstrap		eg. d:\trio\rap			
		Path	Filedef.	d:\swlicens\dmt		eg. d:\trio\dmf			
		Path S	SSV files	d:\swlicens		eg. d:\trio\isa			
Date	Start	End	DD	PD	Parameters				
10.07.99	15:55	-15:56	10.07.	99 10.07.99	9999. 30	000, Trio 008.000 Lice			
				99 03.07.99		100, Trio 008.000 Lice			
CONTRACTOR OF COMPANY AND CO				99 03.07.99		100, Trio 008.000 Lice			
03.07.99	10:38	-10:38	03.07.9	99 03.07.99		000, Trio 008.000Lice			
00 07 00	40.95	-10.96	89 87 1	NO 89 87 00	0000 96	ARA THIS ARA ARA LISS			
					Queue	OK <u>C</u> ancel			

51. Starting the package report on distributor site

7.5.2.1. Contents of the package ZIP file

In the package ZIP file you may place any program definition DMxxxx.SRC / IQxxxx.SRC, program overviews DMREPORT.SSV / IQREPORT.SSV, file definitions xx.SSD and overview FILES.SSV.

Also pictures as for example LOGOs may be inserted.

For distributors making compiled reports, the DMxxxx.EXE compiled program may also be zipped, in which case the customer does not need a compiler to run this.

7.5.3. Issuing a license for the package

For the time being the license request must be forwarded to SW-Tools and the license registered here in a separate system until the license package programs is finally released and documented.

A distributor license with own logo may look like:

					Stieghorst	SS + SySTeC Fieghorster Strasse 115 -33605 Bielefeld		
TRIO Distribution Inc Att. Mr. Good Salesma On the Run 32 Byteaway 15 London SW1 England	Fax	Phone: 00-49-521-9202-1 Faxno: 00-49-521-9202-2 Email: MLudwig@systec-a www: Germany 04.07.99 Fax 0049 4711-0117 99914711 Seite 1 von 1						
Wir bestätigen die folg Lizenznr. Vertreternr. Kunde Name Ihre Referenz	9991471 9991			10-10-2000	Wartung		X	
Package license Produkt 3001 Package 3002 Package 3003 Package	<i>4003</i> V 5 2 3	ASS + SySTeC erwendung Runtime Voll Ligth	Datum 990704 990704 990704	Bis	Lizenz I 68UK Y6FH 91TY.	PJ HA	Anzahl 3 3 3	

52. A printed distributor package license

The logo printed is taken from the dddd.WMF file, here 4003.WMF. The signature printed is taken from the XX.BMP file, XX being the first 2 letters of the user name entered in the license for the current PC.

7.5.4. Copying the package to the customer side

You will have to place the following files on the customer system:

- ddddllll.ZIP The package ZIP file
- LIddddPR.ENG The distributor license file
- nnnnnnn.LIC The customer license file if possible

8. Other amendments and enhancements

8.1. Limits

The following numbers, which previously have been maximum 32.000 bytes, has been extended to 65.000 bytes on 16 Bit, 2.000.000.000 on 32 Bit version.

- Recordlength of a file
- Length of one single alpha field and (from,to) specification
- Number of fields in one group (Tablefields)
- Total size of a report definition (DM1001.src)

8.2. Memory and optimisation

The memory usage allows access from external DLL functions both on the 16 bit and 32 bit version to TRIO internal structures.

In general the modules was previously optimised mostly with respect to the 16 bit versions, now optimisations goes toward the 32 bit versions.

8.3. SW-Tools ODBC Driver

The ODBC driver has been extended to support long fileIDs, datadictionary calculations and external package file definitions also.

8.4. UNIX server SWTUSOCK

The default startup of the Unix server now uses the -x option causing each client to get his own process, which highly improves both performance and stability. To avoid using the -x option you may use -X (uppercase) to turn it off.

8.4.1. LINUX server

A version of SWTUSOCK for LINUX is available.

8.5. Descending index definition

The D options on field in index definitions may be used for the SSV and BASIC drivers and will be threaded exactly as I (invert all bits)
8.6. EXPORT Append to file

If a + is added to the export filename (as c:/tmp/ud+) data will be appended to the file instead of overwriting the file.

8.7. Japanese kanji codetables

The Japanese kanji codetables has been tuned, thanks to SNI Japan for this.

8.8. Network pathnames

It is now possible to use network computer names in the pathnames as \\computername\sharename\directory .

8.9. User administration

A the time of this documentation the full user administration has not been updated for long fileIDs, basisIDs and fieldnumber modifications.

9. Subfunctions

The wellknown ZIP and UNZIP functions for file compression has been buildin and is the basis for PIP print archiving and, together with cryptation, separate licensed packages. For printing, PIP and FORM has been added for archiving and forms. GRID functions for list/combobox handling in IQ has been added.

9.1. The ZIP and UNZIP functions

9.1.1. UNZIP - Unpack files

Number UNZIP(Text par1, Text par2, Text par3, Number par4)

Par4: Max length of par 3

The UNZIP functions takes input from a ZIP compressed file made with the ZIP function or another product like PKZIP or WINZIP.

where the available options are:

-d	restore/create Directory structure stored in .ZIP file
-f	Freshen files in destination directory
-n	extract only Newer files
-0	Overwrite previously existing files
-s[pwd]	Decrypt with password

See also: <u>ZIP</u> Example: UNZIP("-d c:/tmp/zipfile") UNZIP("d:/work/packfile","j:/tmp",#11,512)

9.1.2. ZIP - Zip file compression

Number ZIP(Text *par1*)

The ZIP functions compresses one or more files into a zipfile, which may later be unpacked using the UNZIP functions or other programs like PKZIP or WINZIP.

where the available options are:

	-a	Add files
	-b[drive]	create temp zipfile on alternative drive
	-c"comment"	set comment for all files
	-d	Delete files
	-e[x,n,f,s,0]	use [eXtra Normal (default) Fast Super fast NO compression]
	-f	Freshen files
	-i	add files with archive Attribute set (don't turn attribute
off)	
	-m[f,u]	Move files [with Freshen with Update]
	-0	set .ZIP file date to the latest file in .ZIP file
	-p P	store Pathnames p=recursed into P=specified & recursed into
	-q	Quiet mode
	-r	Recurse subdirectories
	-s[pwd]	Scramble with password
	-t[date]	take files NEWER than or EQUAL to date (default=today)
	-T[date]	take files OLDER than date (default=today)
	-u	Update files
	-w W <h,s></h,s>	include exclude <hidden, system=""> files (default=Whs)</hidden,>
	-x <file></file>	eXclude specified file
	-z"comment"	set .ZIP file header comment

See also: UNZIP,PIP
Example:
 ZIP("d:/work/files*.*")

9.2. PRINT functions

9.2.1. PIP - Print archiving

PIP(Fields par1,Filename par2,Text par3)

PIP enables you to control the print archiving for each report instead of for a printer in general. *Par1* should contain the fields to form the printindex file for search and display of printoverview, as invoice number, customer name or like.

Par2 contains the print archive filename, first char must be a letter. If no path is given the database path from the preference setup is used. If only 4 characters or less is given, YYMM is added to the filename and the date is inserted as 2.field in the printindex file.

Par3 can normally be omitted, in which case the print archives all pages printed since the last PIP function call. You may however state:

* All pages printed
 - No pages, Just add entry to the SSV printindex
 1-3,7 These pages
 0 Current (Last) page only

0=OK, x=Failed.
See also: PRINT,ZIP
Example:
PIP("#1-3","kept") /* Archive into keptYYMM with field 1-3 in printindex

9.2.2. SCRPRT - Recall screen print (IQ)

SCRPRT(Filename par1, Text par2^)

SCRPRT("filename") calls up the screen printer with the saved print from filename. This may for example be used in IQ by click on a field.

For the PIP Print archiving SCRPRT("filename,PIPID") is used, causing all files with the given PIPID to be unpacked from the filename.zip archive.

The second parameter may be used to tune the display on screen, it consist of a textstring with 5 values separated by comma:

Par2: "a,b,c,d,e"

a: 1 = Start display on page 1 b: 1 = Display in window, 0 = Full screen c: -1 = Zoom factor, zoom out once to reduce size d: 4 = If given, print on myprt 4, close after this is done e: 3-4 = If d given, page range to print these pages only may be set Returnvalue: None. See also: <u>PRINT,PIP</u> Example:

SCRPRT("c:/w/ab.cde") /* Show this file using the screen printer SCRPRT("c:/keepit/kept9908,7","1,1,-1") /* PIPID 7, page1 in window zoomed -1

9.2.3. PRINT - Print formula

PRINT(FORM=Text par1) Parameters: Par1: Filename, WMF file for form

PRINT(FORM=c:/swtools/wmf/0101.wmf) defines a WMF picture file which will be used as background form when next page is printed. Returnvalue: None. See also: PRINT, PIP Example:

PRINT(FORM=c:/swtools/wmf/0101.wmf) /* Select this form

9.2.4. PRINT(LAB= - Label function (RAP)

PRINT(LAB=Text par1, Text par2, Text par3, Text par4, Text par5, Text par6)

par6 : Copies

Description: The width and height of any label on the sheet can be given in centimetres or inches by using the following syntax:

7cm equals 7 centimetres

2in equals 2 inches

The below sample produces labels printed from left to right on a label sheet with 21 labels, 3 on each row, 7 rows, where each label has the width/height of 7 centimetres. Each label is printed in 2 copies.

Returnvalue: None. See also: <u>PRINT</u> Example: FIRST PRINT(LAB=1,3,7,7cm,7cm,2) /* Define label print NORMAL

9.3. The GRID Functions for IQ

9.3.1. DGRID - Dialog Database Grid (IQ)

DGRID(text par1, text par2)

Description: This function may be used to generate a dialog of records from a selected table. The dialog will display the records according to an existing index and the fields requested. The syntax of the definition in *par1* is:

A!B!C!D!E!F!G!H!I!J!K

where each parameter is separated by the character "!".

- A File id
- **B** Index
- C Fields to display
- D Column to return value from (Origin 0)
- E Dialog header
- F Selections (Optional Refer to EXEC)
- G Reserved
- H Reserved
- I Reserved
- J Screen x position (optional)
- K Screen y position (optional)

Please note the returnvalue is set to origin 0 of the fields requested to be displayed. For example, if defined

va!1!1-6!0!Select an article

table va is opened using index 1 and display of fields 1-6. If a row is selected the returned value will be the value of display field 0, e.g. field 1 (Article number). If defined

va!2!1,2,6!2!Select an article

table va is opened using index 2 and display of fields 1, 2 and 6. If a row is selected the returned value will be the value of display field 2, e.g. field 6 because

Display field 0 = field 1 Display field 1 = field 2 Display field 2 = field 6

If required to control which records are to be displayed, it may be required to perform selections. As TRIO already supports the command EXEC, it is possible to use a parameter F for this:

va!1!1-6!0!Articles in group 9!va#7==9

This will only include articles within article group 9.

Returnvalue: 0=Ok, row selected x=No row selected, Dialog closed

Example: DGRID("va!1!1-6!0!Select an article", #50) /* User may select an article

9.3.2. <u>GRIDHDR</u> - Set header for grid (IQ)

GRIDHDR(fields par1, fields par2, Bitflag par3)

32768 = Line pointer active

Description: The heading may be set by reference to fields whereas the field names will be used. For example,

va#1-6

will generate a heading as

Article no . Name . Selling price

The format of each field will determine if the column is left or right justified, but may be changed with an option after the field reference. Also, a field may be inserted into the grid without being displayed or scrolled. The following options may be used:

- I left justified
- r right justified
- h hidden
- s no scroll
- i no input
- A definition such as

va#1s,2,6h,7l will display field 1 as a no scroll field, field 2, field 6 will not be displayed and field 7 will be left justified.

Returnvalue: None.

See also: <u>GRIDFLD</u>

Example: GRIDHDR("#50","va#1-10") /* This defined the grid header as field 1-10 from the article table

9.3.3. <u>GRIDFLD</u> - Set fields values into grid row (IQ)

GRIDFLD(fields par1, fields par2, number par3)

par3 : Row number
Description: The function inserts the value of fields in par2 into the grid. Please remember manually to calculate the row number for par3 which starts from 0.
Returnvalue: None.
See also: <u>GRIDHDR</u>
Example: GRIDFLD("#50","va#1-10",0) /* Insert fields values in first row

Figur liste

1. Start of TRIO	. 7
2. Start of TRIO when more users are activated	. 8
3. Start of TRIO with own logo activated	. 9
4. The reduced user menu	10
5. The reduced user maintenance screen	11
6. The language screen	13
7. The 16/32 bit screen	14
8. The product screen	15
9. Printout of manuals	16
10. The printer setup	18
11. Test button, CAVE before trusting printer	19
12. The advanced button in the printer setup	
13. Start of a report showing the report statistics	
14. Display of report details with the PIP id	
15. A standard definition for a PIP file	
16. Calculations for PIP print recall	
17. The IQ program for PIP print recall	35
18. Calculations in IQ program for PIP print recall	36
19. Calculations for a PIP cleanup report	
20. The preferences in the layout function	
21. Picture displayed with or without maintaining the aspect ratio	
22. Keeping aspect ratio	54
23. View and sort options of the database window	
24. Database window including field format	
25. Entering the search criteria	
26. The search result shown in the database window	
27. Sample use of GRID	
28. The GRID calculations	
29. The GRID field in the layout	
30. DGRID dialog	
31. Scrollbar inserted in a IQ/DM form	
32. The demo supplier file with long file ID	
33. Amending the fieldnumbers in the datadictionary	
34. The database window after fieldnumbers has been amended	
35. Creating the FORMAT file with standard formats	
36. The demo article file using standard formats	
37. Selection of maintenance of the database ID's	
38. Maintenance of the database ID's	
39. The database window file and database selection	77
40. The file, field and connection selection in the database window	
41. The new calculation icon in the data dictionary	
42. Selecting where to calculate for a file definition	
43. Selecting calculations for a single field or the complete file	
44. Selecting the SYSTEM FILES mode in the FDF	
45. Creating new functions in the subfunction definition 50	83
46. Entering the function calculation lines	0.0
	83
47. Using the homemade function	83
47. Using the homemade function48. Setting up a package subsystem	83 83
48. Setting up a package subsystem	83 83 89
 Setting up a package subsystem Selection of package distributor in the license program 	83 83 89 92
48. Setting up a package subsystem	83 83 89 92 94

TRIO Frigivelses information (008.000)

Index

Α			
Align			42
ALX			72
Animation			53
Autosize			41
В			
BASID	73;	75;	77
BASIS		· · · · ·	73
BMP7;2	20;	51;	98
Button			18
С			
Cleanup			36
D			
Datadictionary3;6	58;	69;	78
DATAMASTER			
Device			
DISP			
DLL	7	9;1	02
Driver		1	03
E			
EXEC		1	21
EXPORT		1	07
F			
FDF	5;8	7;1	24
G	,		
GIF	.3:	20:	51
Н	,	,	-
HELP			59
I			55
■ Installation		з.	11
IQ	••••	. J,	
.3;26;31;32;33;34;53;60;63;64	·78	•81	• 8
4;87;111;117;120;121;122;123;			,0
]			
JPG		20.	51
L	••••	20,	51
LINUX		1	
Locking	••••		57

0

ODBC	103
OLE	29
Ρ	
Package	85;89;91
Picture	
PIP	
3;13;23;24;25;28;29;31;32	2;33;34;35;3
6;37;111;114;116;117;118;	124
Preferences	44
PRINT21;115;116;	
Printindex	30
R	
Recordlength	
Runtime	3;86;91
S	
Scaling	52
Search	
SQL	
SSV 26;30;37;73;84	;97;106;116
SUPER	10
SUPERINDEX	
SWTUSOCK	104;105
Т	
TRIO	
1;3;4;5;6;7;13;15;19;27;29	9;41;51;67;7
6;79;80;83;85;86;87;88;89;	;90;91;93;9
4;95;102;121;124	
U	
UNIX	104
UNZIP	112;113;114
User	;79;110;121
V	
VIEW	13;24;25
W	
WRITE	
Z	
ZIP	
3;29;36;37;84;87;88;96;97	:99:111:112
;113;114;116	,,
,===, == ·, ==	